

CLAIMS

What is claimed is:

1. An apparatus for recording and/or reproducing audio and/or video data on a recordable and/or rewriteable recording medium, comprising:
 - a pickup to record and/or read at least one still picture on a first region of the recording medium; and
 - a controller arranging still pictures in the first region into a number of groups so as to manage the still pictures at a group level, based on at least one still picture group information recorded and/or read on a second region of the recording medium, wherein said still picture group information includes at least one still picture information for the one still picture, with first virtual deletion information being included within the one still picture information,
 - wherein the pickup records and/or reads a plurality of additional audio parts, on a third region of the recording medium, to be added to the still pictures, with the still picture group information further including information for connectivity between the still pictures in the first region and the additional audio parts in the third region, for reproduction of still pictures and/or corresponding additional audio parts by the apparatus for recording and/or reproducing audio and/or video data, and
 - wherein if the first virtual deletion information is set to a virtual delete state, the one still picture is not reproduced upon playback of the recording medium, with the virtual deletion information being at least one flag.
2. The apparatus of claim 1, wherein each still picture comprises a video part and at least some of the still pictures each comprise an original audio part, the original audio parts are recorded consecutively after the corresponding video parts, and neither the video part nor the original audio part of the corresponding still picture are reproduced if corresponding virtual deletion information thereof is set to the virtual delete state.
3. The apparatus of claim 1, wherein if the virtual delete state of the first virtual deletion information is cleared, the one still picture is restored to be reproducible.
4. The apparatus of claim 1, wherein if all still pictures belonging to a same still picture group in the still picture group information are set to the virtual delete state, all of the data belonging to the corresponding still picture group is deleted and the corresponding still

picture group information is deleted.

5. The apparatus of claim 1, wherein the controller controls the pickup to record and/or read additional audio group information, on the second region of the recording medium, for grouping and managing the plurality of additional audio data, the additional audio group information including second virtual deletion information for virtually deleting the additional audio parts, the second virtual deletion information for the additional audio part corresponding to a still picture whose corresponding virtual deletion information is in the virtual delete state is set to the virtual delete state, and the additional audio part set to the virtual delete state is not to be reproduced.

6. The apparatus of claim 5, wherein if the virtual delete state of the second virtual deletion information is cleared, the corresponding additional audio part is restored to be reproducible.

7. The apparatus of claim 5, wherein if all additional audio parts of a same additional audio group in the additional audio group information are in the virtual delete state, all data of the corresponding additional audio group and the corresponding additional audio group information are deleted from the recording medium.

8. The apparatus of claim 1, wherein each of the first, second and third regions exists in separate files.

9. The apparatus of claim 1, wherein the first and third regions exist in one file.

10. The apparatus of claim 1, wherein the still picture group information of the second region further includes still picture group general information containing information relating to a number of the still picture groups, and additional audio general information containing information relating to a number of the additional audio groups.

11. The apparatus of claim 1, wherein the still picture group information includes still picture group general information containing start positions of each still picture group, a plurality of still picture information areas including information relating to a number of video parts in each still picture group and information for corresponding still pictures in each still picture group, the

information for the corresponding still pictures containing position information for the still pictures.

12. The apparatus of claim 11, wherein the still picture group general information further includes identification information for each still picture group.

13. The apparatus of claim 11, wherein the position information for the corresponding still pictures includes sizes of video parts and first virtual deletion information of the still pictures, respectively.

14. The apparatus of claim 13, wherein the controller control the pickup to record and/or read original audio data consecutively after corresponding ones of the still pictures, wherein the position information for the still pictures further includes sizes of audio parts for the corresponding original audio data, respectively.

15. The apparatus of claim 13, wherein the position information for the still pictures further includes identification information for each still picture in each still picture group.

16. The apparatus of claim 1, wherein the connectivity information further includes identification information for additional audio groups into which the additional audio data are grouped and identification information for the additional audio data in the corresponding additional audio groups.

17. The apparatus of claim 1, wherein the additional audio group information includes additional audio group general information containing the start position of additional audio groups into which the additional audio parts are grouped and information relating to a number of the additional audio parts in each additional audio group, and information for additional audio parts, the information for the additional audio parts containing position information for the additional audio parts in each additional audio group.

18. The apparatus of claim 17, wherein the additional audio group general information further includes identification information for each additional audio group, and the information for the additional audio parts further includes identification information for the additional audio parts in each additional audio group.

19. The apparatus of claim 17, wherein the position information for the additional audio parts includes second virtual deletion information and size information of the corresponding additional audio parts.

20. The apparatus of claim 1, wherein the second region further stores playback information related to reproduction.

21. The apparatus of claim 20, wherein the playback information includes identification information for at least one still picture group, and information for playback start and ending positions in the at least one still picture group.

22. The apparatus of claim 20, wherein the playback information is applied to all or some of the still picture groups.

23. The apparatus of claim 2, wherein the still picture group information includes still picture group general information containing start positions of each still picture group, a plurality of still picture information areas including information relating to a number of video parts in each still picture group and information for corresponding still pictures in each still picture group, the information for the corresponding still pictures containing position information for the still pictures.

24. The apparatus of claim 3, wherein the still picture group information includes still picture group general information containing start positions of each still picture group, a plurality of still picture information areas including information relating to a number of video parts in each still picture group and information for corresponding still pictures in each still picture group, the information for the corresponding still pictures containing position information for the still pictures.

25. The apparatus of claim 4, wherein the still picture group information includes still picture group general information containing start positions of each still picture group, a plurality of still picture information areas including information relating to a number of video parts in each still picture group and information for corresponding still pictures in each still picture group, the information for the corresponding still pictures containing position information for the still

pictures.

26. The apparatus of claim 1, wherein the still picture group information includes still picture group general information containing start positions of each still picture group, a plurality of still picture information areas including information relating to a number of video parts in each still picture group and information for corresponding still pictures in each still picture group, the information for the corresponding still pictures containing position information for the still pictures.

27. The apparatus of claim 2, wherein the controller controls the pickup to record and/or read playback information, in the second region of the recording medium, related to reproduction.

28. The apparatus of claim 3, wherein the controller controls the pickup to record and/or read playback information, in the second region of the recording medium, related to reproduction.

29. The apparatus of claim 4, wherein the controller controls the pickup to record and/or read playback information, in the second region of the recording medium, related to reproduction.

30. The apparatus of claim 1, wherein the controller controls the pickup to record and/or read playback information, in the second region of the recording medium, related to reproduction.

31. An apparatus for recording and/or reproducing audio and/or video data on a recordable and/or rewriteable recording medium, comprising:

a pickup to record and/or read at least one still picture on the recording medium, and to record and/or read at least one virtual deletion information on the recording medium, each virtual deletion information corresponding to one still picture, wherein virtual deletion information corresponding to the one still picture is indicative of whether the one still picture is currently reproducible upon playback of the recording medium, with the virtual deletion information being at least one flag; and

a controller to control the pickup to record and/or read the one still picture and one virtual

deltion information, and to control the pickup to record and/or read at least one additional audio part, on the recording medium, added to the at least one still picture, and connective information, on the recording medium, indicative of connectivity between the still pictures and the additional audio parts, for reproduction of still pictures and/or corresponding additional audio parts.

32. The apparatus of claim 31, wherein if the virtual deletion information corresponding to the one still picture is indicative of the one still picture being set to a virtual delete state, the controller controls the one still picture not to be reproduced.

33. The apparatus of claim 32, wherein each still picture comprises a video part and at least some of the still pictures comprise an original audio part, the original audio parts are recorded consecutively after the corresponding video parts, and neither the video part nor the original audio part of the corresponding still picture are reproduced if the virtual deletion information thereof is set to the virtual delete state.

34. The apparatus of claim 32, wherein if the virtual delete state of the virtual deletion information is cleared, the corresponding still picture is restored to be reproducible.

35. The apparatus of claim 31, wherein the controller controls the pickup to record and/or read additional virtual deletion information, on the recording medium, for the additional audio parts, wherein the additional virtual deletion information is indicative of whether a corresponding one of the additional audio parts is currently reproducible.

36. The apparatus of claim 35, wherein if the additional virtual deletion information is indicative of a corresponding one of the additional audio parts being set to a virtual delete state, the controller controls the corresponding additional audio part to not be reproduced.

37. The apparatus of claim 36, wherein if the virtual delete state of the additional virtual deletion information is cleared, the corresponding additional audio part is restored to be reproducible.

38. The apparatus of claim 35, wherein if the virtual deletion information for the corresponding still picture is set to the virtual delete state, then the additional virtual deletion

information is automatically set to the virtual delete state as well.

39. The apparatus of claim 33, wherein the controller controls the pickup to record and/or read additional virtual deletion information, on the recording medium, for the additional audio parts, wherein the additional virtual deletion information is indicative of whether a corresponding one of the additional audio parts is currently reproducible.

40. The apparatus of claim 39, wherein if the additional virtual deletion information is indicative of a corresponding one of the additional audio parts being set to a virtual delete state, the controller controls the corresponding additional audio part to not be reproduced.

41. The apparatus of claim 40, wherein if the virtual delete state of the additional virtual deletion information is cleared, the corresponding additional audio part is restored to be reproducible.

42. The apparatus of claim 39, wherein if the virtual deletion information for the corresponding still picture is set to the virtual delete state, then the additional virtual deletion information is automatically set to the virtual delete state as well.

43. The apparatus of claim 31, wherein the controller controls the pickup to record and/or read still picture group information, on the recording medium, for separating the still pictures into predetermined groups, wherein the still picture group information includes a start position of each still picture group and sizes of the respective still pictures within the still picture group.